Issue 8 Summer 2011

KENTUCKY DEPARTMENT FOR NATURAL RESOURCES



OUR MISSION STATEMENT

Improve the quality of life for all Kentuckians by protecting our land, air, and water resources; utilizing our natural resources in an environmentally conscientious manner; creating efficient environmentally responsible ways of managing, conserving and sustaining our resources for future generations.



Commissioner's Corner

By Carl E. Campbell, Commissioner **Department for Natural Resources**

Dear Colleagues,

I would like to thank all of you in the Department for Natural Resources who continue to promote environmental education and reach out to the citizens in your part of the state. Your efforts yield vast improvement in the protection of our land, air, and water resources. From my perspective, the interagency coordination and collaboration is remarkable. You deal with large issues, affecting the families of all Kentuckians, on a level that is unmatched in all my years of experience.

The recent mine rescue in Bell County was another example of competent, caring people putting their expertise and experience into practice. Every miner in Kentucky should realize the emphasis placed on their safety by our employees in the Office of Mine Safety and Licensing. OMSL Executive Director Johnny Greene has put together 12 teams that take the business of mine rescue very seriously. The experience of these men and their dedication was recently displayed in the successful rescue of three men trapped for almost 14 hours underground. Our mine rescue teams are unique in that they are made up of inspectors or analysts who are familiar with their individual mines and thus provide rescue with confidence. The cause of the entrapment is still under investigation and OMSL will assist in any redesign of features that may have contributed to the problem.

The Division of Forestry (KDF) reciprocates with agencies in other states when the need arises. KDF has been a committed member of the Southeastern Forest Fire Protection Compact since 1954. The 10-member states agree to assist each other to the extent possible, dependent upon their own state's fire status. Personnel who volunteer for compact detail are generally assigned to an area for 14 days and the state providing the assistance is reimbursed for all personnel and equipment costs. Kentucky's rainy spring kept the wildfire potential low here, but other states have not been as fortunate. Wildfires in Florida and Georgia have burned thousands of acres resulting in tremendous loss of forests, property, and wildlife habitat. Our employees and equipment have been deployed to both areas to assist in the firefighting efforts.

I am extremely proud of the expertise and professionalism of our staff. With a department this large, it is difficult to recognize every individual act of heroism and dedication. I congratulate your successes this guarter and sincerely appreciate your accomplishments.

Office of Mine Safety and Licensing Recognizes Life Saving Effort



Natural Resources Commissioner Carl Campbell recognized Mine Emergency Technicians (METs) and joined B & W Resources in a presentation to the METs (left to right): L.J. Bowling, Tammy Combs, James Barnes, Marcus Roberts, Eric Bowling, Ernest Fuson, Ralph Crawford, Chris Woodard and OMSL Executive Director Johnny Greene.

On a recent spring day, a blasting crew prepared to fire a shot at a B & W surface mine in Clay County. They were unloading a truck and making final preparations when one of the men sat down on a nearby berm. When a co-worker asked if he was alright, he was unresponsive. The co-worker laid him down and immediately called the company mine emergency technicians (METs). The blaster closed his eyes, stopped breathing and had no pulse. The company METs arrived within minutes, repositioned him for CPR and opened his airway. He began breathing and regained his pulse. Meanwhile, 911 had been called and an ambulance was enroute. The METs administered oxygen and monitored his condition until the ambulance arrived. The hospital confirmed later that he had suffered a heart attack.

According to Ricky Johnson, district supervisor for OMSL in Barbourville, "Because everyone involved took their training as METs seriously, I believe a fatality was avoided today. The victim's co-workers knew to activate the emergency system when he became ill. The superintendent and the METs made the correct decisions at a time when they were under great stress. The victim had lost his pulse, was not breathing, and had started turning blue. He is alive and talking this morning."

Kentucky mine safety law dictates that a mine must have METs employed on every shift engaged in the production of coal and at least one on every non-production shift. METs are trained and certified by OMSL to perform their emergency duties.

First Lady Jane Beshear Participates in Kentucky Arbor Day Ceremony

Lynn True, Division of Forestry

Earlier this year, Gov. Steve Beshear proclaimed April 1, 2011 as the 115th Arbor Day in the Commonwealth, continuing a long tradition of observing the first Friday in April as Kentucky's Arbor Day. To celebrate the event, First Lady Jane Beshear joined the Division of Forestry in planting an American Hornbeam on the grounds of the Governor's Mansion. Mrs. Beshear noted the importance of celebrating Arbor Day in the Commonwealth's communities. "Arbor Day is a reminder that we need to protect and properly care for our trees because of the benefits they provide, like shading our city streets and sidewalks and saving on energy costs."

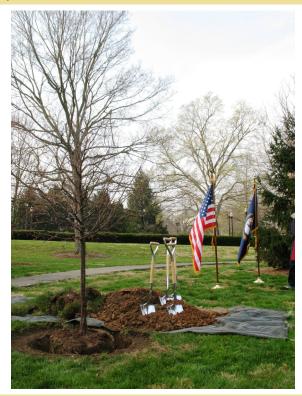
Leah MacSwords, director of the Kentucky Division of Forestry, opened the ceremony by acknowledging the importance of environmental stewardship and Arbor Day in Kentucky. MacSwords also extended appreciation to the Finance and Administration Cabinet for co-hosting the event. "Conserving our natural resources is a priority of this administration and for all citizens. I am pleased that Kentuckians plant nearly a half million trees as an act of good stewardship and in celebration of Arbor Day throughout the month of April," said MacSwords.

During the event, the newest Tree Line USA, Bluegrass Energy, and the newest Tree Campus USA winners, Centre College, University of Louisville and Western Kentucky University, were recognized for their efforts to protect and enhance urban and community forests. Tree Line USA recognizes public and private utility companies that promote safe, reliable electric service in conjunction with healthy trees across utility areas. Tree Campus USA recognizes college and university campuses for effectively managing campus trees and fostering urban forestry programs. Both programs are supported by the Arbor Day Foundation, the National Association of State Foresters and by state forestry agencies.

Many other Arbor Day events were held throughout Kentucky during the months of April and May. Schools, communities and organizations throughout the state often hold their own Arbor Day ceremonies to highlight the social, environmental and economic benefits of trees.



Kentucky First Lady Jane Beshear and Kentucky Division of Forestry Director Leah MacSwords speak at Kentucky's Arbor Day Celebration



American Hornbeam planted during Arbor Day celebration.

Barbourville Mine Rescue Team Responds to Emergency

Three miners trapped in flooded mine wade to freedom after 14 hours

Three miners, trapped by flooding for almost 14 hours in a Bell County coal mine, were rescued without injury Monday evening June 20, 2011.

The men came out of the mine about 8:20 p.m. and were reunited with their families who had been waiting nearby at the West Cumberland Baptist Church. Preliminary indications point to a diversion ditch failure that allowed water to quickly flood the mine. Pernell Witherspoon, Doug Warren and Russell Asher were trapped underground around 6:40 a.m. at Bell County Coal's Jellico No. 1 Mine near Middlesboro

An estimated six inches of heavy rain had fallen overnight. OMSL is investigating the source of the water, which quickly collected in a dip about 180 feet inside the mine's entrance, preventing the miners from getting out.

Tracy Stumbo, chief investigator for the OMSL, said the trapped miners reached high ground and waited in an area 600 feet from the mine's entrance during their daylong ordeal. They had light and communicated by phone to a joint command center coordinating the rescue effort.

Rescued miner Doug Warren (center) approached Tracy Stumbo, chief accident investigator. Pernell Witherspoon is shown directly behind Warren.

Freeing the miners required pumping water from the mine. Late in the day, the water was low enough for the miners to wade to the outside. Medical personnel examined the miners when they emerged.

This type of rescue along with a host of other mine related emergency situations are addressed throughout the year by OMSL Executive Director Johnny Greene and rescue teams across the Commonwealth through mine rescue contests and advanced training.

Gov. Steve Beshear closely monitored the efforts to free the miners and was in constant contact with officials at the scene. State, federal and coal company officials worked jointly on the rescue.



Miners and their rescuers shake hands before the men are taken to their families.



Rescuers leaving the pit after the successful rescue.

Henderson County Couple Discovers Oil Too Close to Home

Kentucky's "state-bid" plugging program pays for cleanup and abatement

Worried about their health, safety and property values, Danny and Juanita Russell contacted the Division of Oil and Gas (DOG) in April to report a stain of oil that appeared in their front yard. Division inspector Jennifer Miller was dispatched to investigate the Russell's concerns regarding the reported oil stain.

Jennifer researched the division's database to identify the abandoned well suspected to be the source of the oil stain. Miller took photos of the affected area and investigated circumstances that led to the abandonment of the well which had been covered due to construction of the Russell residence. She cited the well's former operator for improper abandonment and for not properly closing it to prevent waste under KRS chapter 353. After receipt of Jennifer's inspection report, and because of the immediate concerns for the Russell's health and safety. the division identified the well as "emergency status" and placed the well as a top priority for plugging and abandonment under the "state-bid" plugging program.

The division submitted plugging contract bids to two contractors with the competitive bid awarded to Boss Cementing on May 15, 2011. Plugging operations began May 20 under the direction of Inspector Miller with the placement of cement plugs strategically located in the wellbore to properly isolate the producing horizon. The casing head was exposed and the oil soaked topsoil was properly removed using a backhoe. The plugging crew cleaned out the wellbore to a depth of 1,750 feet and set the first cement plug at a depth of 1,721 feet.

The second and third plugs were set at depths of 1,147 and 600 feet, respectively. Class A cement was circulated to the surface level through two-inch tubing and the outside casing was perforated to ensure that all plugs and cement stay in place permanently. Finally, after the plugging operation, the contractor reclaimed the surface by replacing the



Oil spill on the front yard of the couple in Henderson Co.



The plugging crews working at depths that will permanently and safely seal the crude oil below the surface.

topsoil, grading the site smoothly, and heavily seeding the area. Work was completed on May 25, 2011 to the satisfaction of the Mr. and Mrs. Russell.

Through the "state bid" program, the division plugs and abandons orphan wells identified by inspectors and prioritizes wells based on environmental and/or safety impact. Funding is generated by bond forfeitures. DOG has plugged more than 3,400 wells at no cost to the citizens of the Commonwealth.

Fort Thomas Students Celebrate Arbor Day and Twenty Years as a Tree City USA **Lynn True, Division of Forestry**

Students in the city of Fort Thomas have a greater understanding and appreciation for Arbor Day and urban forests, thanks to Luke Saunier, a Kentucky Division of Forestry forest ranger technician in northern Kentucky. Saunier, who has a keen interest in forestry education and a natural ability to teach children about the importance of trees and forest ecosystems, recently spent time with students in each of Fort Thomas' elementary schools. His forestry education program is designed specifically to complement the science curriculum and to meet core content of educational requirements – a growing necessity for non-formal educators to speak in school systems today.

"Students from Johnson, Ruth Moyer, St. Catherine, St. Thomas and Samuel Woodfill participated in the one-hour program and after learning about the value of trees, they were encouraged to enter a poster or essay contest," said Saunier. "There were over 60 entries in the contest and that is a testament to the students as well as the community. This city has beautiful parks and a history of planting trees and maintaining community forests," added Saunier.

The city of Fort Thomas has been involved in community forestry for many years. In fact, this year marks the 20th year in the Tree City USA program – a national program sponsored by the Arbor Day Foundation and the National Association of State Foresters. To commemorate the city's twentieth year in the program, to celebrate Arbor Day and to announce the winners of Saunier's forestry contest, an event was held at Tower Park for students and community members on May 13.



At the event, Fort Thomas Tree Commission members Barbara Manyet and Megan de Sola, as well as city administrative officer, Don Martin and assistant city administrator Jay Treft, were on hand to speak about why trees are beneficial to their city. Essay winners Garrett Harrison, Maura Juenger and Gabriel Powell and poster winners, Margot Seidel, Carly Lorenz and Karli Baioni were presented wooden plagues made especially by the University of Kentucky's Wood Utilization Center overseen by Carroll Fackler. In addition to the speakers and awards ceremony, each student assisted with planting our state tree – a yellow-poplar.



Forest Ranger Technician Luke Saunier posing with an award winning student at the event in Fort Thomas.

Editor's Note:

The Fort Thomas Tree Commission includes Chairperson Barbara Manyet and members Kris Barton, John Cody, Megan de Sola, John Homer, Mark Leopold and Frank Twehues.

Special thanks go to Carroll Fackler and UK's Wood Utilization Center for making wooden plaques for the poster and essay contest winners and to Fort Thomas Florist and Nursery for donating two yellow -poplar trees and two sycamore trees for planting at Tower Park.

Envirothon Announces Winners of State Contest

Kim Richardson, Division of Conservation

The Kentucky Division of Conservation recently announced the winner of the 2011 Kentucky Envirothon. duPont Manual High School topped all other groups in the competition held May 19-20 at the Kentucky Leadership Center near Nancy. The winning team will go on to represent Kentucky at the Canon Envirothon, an international event hosted by Mount Allison University in Sackville, New Brunswick, Canada July 24-29, 2011.

The competition began with 33 teams from across the state contending for the top slots from each of the two regional competitions held in April at the Western Kentucky University Farm and the Robinson Center for Appalachian Resource Sustainability. Two Logan County High School teams, Green County High School FFA, three Southwestern High School teams and two Paul Laurence Dunbar High School teams advanced to the state finals.

Students were tested on their environmental knowledge in five areas: soils, aquatics, forestry, wildlife, and fresh and salt water estuaries. During the state competition, students were also judged on an oral presentation dealing with fresh and salt water estuaries.

Finishing behind duPont Manual Team A, the teams from the duPont Manual Team B and Southwestern Team A took second and third place, respectively.

Green County High School was the top scoring FFA team and will go on to represent Kentucky in the National FFA Career Development Event. "This year's state contest was very competitive and the close competition demonstrated the hard work of each of the state teams," said Division of Conservation Director Steve Coleman. "This tough state contest will prepare Kentucky's winning team to finish in the top level at the national contest. We wish duPont Manual High School great success at the Canon Envirothon later this summer."

Sponsors of the Kentucky Envirothon were: Kentucky Association of Conservation Districts, Kentucky Farm Bureau, Kentucky Department of Agriculture, Kentucky Corn Growers and Kentucky Small Grains, Farm Credit Services, Kentucky Department of Fish and Wildlife Resources, Kentucky Association of Conservation Districts' Auxiliary and several local conservation districts.

The Divisions of Forestry, Water, Conservation assisted with the competition.



Envirothon winner duPont Manual with Conservation Director Steve Coleman (right)



Students identify soil layers in this educational exercise.



Students add chemicals to water samples to determine pH and dissolved oxygen levels.

Arbor Day Foundation Honors Kentuckians for Tree Planting Initiative and Environmental Stewardship

Lynn True

The Arbor Day Foundation, the nation's largest nonprofit organization dedicated to planting trees, recently honored three organizations and individuals from Kentucky for advancing sustainable forestry on public and private lands. The recipients include the Appalachian Regional Reforestation Initiative (ARRI), Hart County landowner Charles D. Williams and Prospect Mayor Todd Eberle.

ARRI, a partnership formed in 2004 to restore the beauty of the Appalachian Mountains, received the "Forest Lands Leadership Award" for advancing sustainable forestry on public forest land. ARRI's partnership includes citizens, the coal industry, and government agencies who are dedicated to restoring forests on coal mined lands in the Eastern United States. ARRI has reforested about 45,000 acres with more than 30 million trees since 2007. Paul Rothman of DNR and state forester Leah MacSwords accepted the award on behalf of the partnership. DNR Commissioner Carl Campbell said, "I am extremely proud of Paul and Leah in their efforts to bring back Kentucky's forests. The reforestation of surface mining operations is of primary importance and a long-term goal of DNR. Their involvement has made DNR a leader in the reforestation of previously mined lands since 1996."



DNR's Paul Rothman, environmental scientist (center) and Leah MacSwords, director, Kentucky Division of Forestry (right) receive the award from John Rosenow, chief executive and founder of the Arbor Day Foundation (left).

Hart County landowner, Charlie Williams was also recognized by the Arbor Day Foundation with a "Good Steward Award" for practicing sustainable forestry on his 929-acre woodland in Hart County. Williams is known around Munfordville as "the Tree Man," a nickname he earned by planting thousands of trees since he was 15. As a young man, Williams and a neighbor sold redbud and dogwood trees all over town. Today, residents are treated to a spectacular show of blossoms each year in April thanks to his handiwork. William's accomplishments include planting trees on his farm every Good Friday since 1976, being nominated for the National Tree Farmer of the Year last year and winning several state and regional awards. While serving as Munfordville's city attorney from 1993 until 2004, he also started the community's Arbor Day program.

Urban forestry projects were also honored as Todd Eberle, mayor of Prospect, was recognized with the "Champion of Trees" award for his efforts to promote forestry in his community. Eberle has done more work for his community's urban forest during his first term than many public officials do in a lifetime. He worked with the city council to develop tree-care ordinances, established the Prospect Forestation Board, required the city to maintain all public trees, and equipped his team with the latest arboricultural and urban forestry tools and techniques. By 2008, Prospect earned Tree City USA recognition for the first time, and has since received two Tree City USA Growth Awards for exceeding the program's standards. Prospect was also one of the first communities in Kentucky to implement a response plan to the invasive Emerald Ash Borer by using the latest computer software and recruiting an army of volunteers to assess the diversity of the city's trees.

The Arbor Day Foundation annually honors individuals, organizations and conservation groups that make a positive impact through tree-planting and environmental or nature education initiatives. "When we honor tree planters for the work they do today, we are commemorating the benefits they are leaving for future generations," said John Rosenow, chief executive and founder of the Arbor Day Foundation. "This group of Arbor Day Award winners is leaving a lasting legacy through the simple act of planting trees and caring for the earth."

AML announces Start of Water Supply Project in Breathitt County Corey Ann Howard, Division of Abandoned Mine Lands

A groundbreaking ceremony held in a community along highway 476 in Breathitt County on April 28, 2011, celebrated the beginning of the Division of Abandoned Mine Lands' (DAML) waterline project in their local community.

DAML awarded contracts and authorized the start of construction for the project. A Memorandum of Agreement totaling \$2.6 million has been reached between DAML and the Breathitt County Water District. The waterline and pump stations will be constructed by G & W Construction of Morehead with the water tanks to be installed by Laurel Construction of London. Nesbitt Engineering of Lexington will provide engineering and inspection services.

A groundwater contamination study performed by DAML has determined the area to have been impacted by AML-eligible past mining. Residents of Caney Creek, Right Fork Caney Creek, Upper and Lower Beaver Dam, Fugate Fork, Laurel Fork, Church Road, and Buckhorn Creek Road up to the Robinson Forest Camp areas located off Troublesome Creek will be served by this project. Approximately 90,740 linear feet of waterline will be constructed with approximately 215 water meters being installed.



"As a native of a rural Kentucky county, I understand the importance of individuals receiving clean, potable water," said Department for Natural Resources Commissioner Carl Campbell. "This is one of many DAML waterline projects that reflect the department's continuing efforts of providing water to the people of rural Kentucky coalfields."

DAML is authorized under KRS.350 to abate hazards to public health, safety and the environment from abandoned mine lands. To date, DAML has expended more than \$80 million for waterline improvements and has provided more than 12,000 households with potable water supply in 24 coalfield counties in eastern, southern and western Kentucky.

Waterline Update

On June 3, 2011, Gov. Steve Beshear announced funding for water supply projects in several eastern Kentucky counties, while praising ongoing AML efforts to provide potable water to Kentucky's citizens affected by past mining. "Making sure Kentucky residents have access to a safe, clean water supply should never be taken for granted," said Gov. Beshear.

Residents living in Breathitt Co, Mudlick/Franks Creek (Johnson), Paintsville Lake area (Johnson), Dry Creek/Clear Creek (Knott), Treadway Road (Lee/Owsley), Trace Fork/Spicy Ridge (Martin), Whoopflarea (Owsley/Perry), South Perry (Perry) and Vicco (Perry/Letcher) should be noticing the construction of a water supply project funded by the Division of Abandoned Mine Lands (DAML) in their local community. The projects, totaling approximately \$16 million, will provide potable water to approximately 1,393 households, including all the households in Johnson County that are served by Paintsville Utilities when the new water treatment plant comes on line in 2012.

Additional funding, approximately \$12 million, has been set aside by DAML for six future waterline projects to serve residents in Breathitt (Copeland, Duck Hollow & River Caney), Knott (portions of Clear Creek and Arnolds Fork), Letcher (Pine Creek, Cram Creek, and some of Pert Creek) Perry, (Big Branch Rt. 2447) and Wolfe counties (Campton to Bethany, Mary and Flat) and will provide approximately 914 households in these rural, local communities with access to potable water.

Students Plant Trees on Mine Site in Perry County

Paul Rothman and Linda Potter

On a cold windy day in May, over 100 students and their teachers from R. W. Combs Elementary in Perry County, Kentucky, along with student members in the Future Farmers of America, the Boy Scouts and students from the Lexington Catholic Beta Club planted over 700 native hardwood seedlings and a large number of wetland plants to aid in reforestation and wetland creation on mined lands. The students also learned how to create forest-based pollinator habitat for honey bees and other insects.

The event was hosted by the James River Coal Co. on its coal surface mining operation near Vicco, south of Hazard, Kentucky. Representatives from the Kentucky Energy and Environment Cabinet, the Kentucky Department for Natural Resources (DNR), the Kentucky Division of Forestry and the U. S. Office of Surface Mining participated in the event. A focus of the event is to teach students about land conservation and reclamation. "It's part of being good stewards of the land. It's putting the land back into the shape that we found it previously," said James River Coal President Brian Patton.

Coal Mining Our Future hosted a "Trees, Bees, Frogs and Me" poster contest for the Combs Elementary students. The top three entries received \$100, \$75 and \$50 in savings bonds. All participants received a white pine seedling at the close of the event to plant in their yard.

Reforestation of previously mined lands has been encouraged in Kentucky since DNR and the University of Kentucky began researching its viability in 1996. Utilizing loose soil prepared according to specific guidelines, the Forestry Reclamation Approach (FRA) has resulted in greater tree growth, both in height and survival rates, than many virgin forest soils. Planting native hardwoods provides landowners with a sustainable source of income, improves water quality and offers habitat for forest animals.

Wetlands construction and bee colony establishment are relatively new partnerships which promise to complement the reforestation initiative by interspersing wetland areas and bee habitats in the forest.



Representatives from the Kentucky Division of Forestry assist the children





DNR Commissioner Carl Campbell (center) presented the ARRI award to representatives from Heritage Coal Co.

OSM and **DNR** Join Forces for Special Study

Contemporaneous reclamation variances in Kentucky get oversight through special study

Kentucky Administrative Regulations require that reclamation operations, such as backfilling, grading, soil preparation and revegetation, occur as contemporaneously as practicable with mining operations. Essentially, reclamation follows mining activities as closely as possible. In early 2011, OSM and DNR agreed to a joint oversight review of the contemporaneous reclamation standards for permitting and field review. Occasionally, a mining company will request variances to established standards. Variances involve time, distance and number of pits and depend on mining method. For example, in contour mining, backfilling and grading to its Approximate Original Contour (AOC) must follow coal removal by not more than 60 days and by not more than 1,500 linear feet.

A 2003 Contemporaneous Reclamation study found that while DNR had effective methods for permitting and enforcement activities, some older permits contained vague descriptions for the variances, which adversely affected field enforcement. The 2011 study revisits the state-approved variances to these standards to determine Kentucky's progress since the earlier study. The review looked at DNR's permitting of contemporaneous reclamation variances (CRVs) as well as their field inspection and enforcement. In addition, the study examined DNR's processes to ensure the posting of supplemental assurances.

This study concentrated on active coal mine permits that had CRVs. Two active surface coal mines from each of the five Division of Mine Reclamation and Enforcement (DMRE) regional offices were evaluated. A joint OSM/DNR team performed permit and field inspections to evaluate the implementation of Kentucky's approved standards for the CRVs.

OSM has not yet released the final report, but DNR staff on the team felt that the study validated permitting procedures and enforcement actions. Permit descriptions were clear and enforceable while no contemporaneous violations were found.

(left to right) Pictured at Czar Coal Corp. permit # 880-0163 in Prestonsburg is Regional Administrator Greg Weddington, Deputy Commissioner Larry Arnett and Paul Rothman from DNR.



Gallatin Steel Celebrates Earth Day with Environmental Field Day

Lynn True, Division of Forestry

Each spring Gallatin Steel, a steel manufacturing company and major recycler of scrap metal in northern Kentucky, celebrates Earth Day by giving back to the community. To celebrate the eco-holiday, the workers at Gallatin Steel, along with local natural resource professionals, provide an environmental field day for fourth-graders in Carroll and Gallatin counties. In addition to planting trees, the students participate in activities ranging from forestry, geology, soil sampling and water quality to physics, electricity, safety and a fitness challenge course.

Pat Underwood, environmental coordinator for Gallatin Steel, has organized the field day for five vears and the success of the event is clearly evident. "We have the perfect setting for outdoor education – the banks of the Ohio River," said Underwood. "Five years worth of tree plantings are growing strong along this river bank. It's the best of all worlds, the students learn about the importance of trees and other natural resources, our company benefits by improving environmental awareness and our community benefits from having a reforested river bank."

Underwood also credited the Kentucky Division of Forestry (KDF), the Natural Resource Conservation Service (NRCS), the Ohio River Valley Sanitation Commission (ORSANCO) and Gallatin Steel staff for their assistance with the event. "A great deal of planning and coordination with other agencies is required to make this event run smoothly and KDF has been an important partner in assisting with the reforestation project," he noted. Chris Scott, KDF Forest Ranger for Gallatin County, has worked with Underwood since the inception of the field day in 2006. Scott's technical assistance regarding tree selection, spacing and maintenance has gone a long way in making the reforestation project a success.

Scott not only recommends the species of trees to plant, he also assists with ordering, delivery and site preparation. Species suitable for riparian streamside plantings such as persimmon, flowering dogwood, black walnut, yellow poplar, pin oak and Northern red oak have been used over the years. On the day of the event, Scott provides students with instruction and demonstration of how to plant bare-root seedlings.

Each student is then responsible for planting their own seedling, overlaying a vegetation mat to suppress weed growth and attaching tree shelters to protect the trees from animal browse and herbicide damage.

Although tree planting is certainly a highlight of the event, students participate in many other activities throughout the course of the day. A total of seven different stations are set up to offer a unique chance for students to learn about the environment and enjoy a rare school day spent outdoors. The forestry station, taught by Luke Saunier, a KDF forest ranger in the Bluegrass District, offers the chance to learn about forest ecosystems. At the geology station, taught by Gallatin Steel workers Terry Hagedorn and Carrie Wilson, students learn about sedimentary, metamorphic and igneous rock in a lesson called "edible rocks." Other stations include lessons on water quality and different types of soils.

At the end of the day, a demonstration and discussion of electric currents and fulcrum points, as well as a heart-pounding physical challenge course, wrap up the event. With environmental field days and outdoor classrooms becoming ever-popular with teachers, students in Carroll and Gallatin counties are certainly fortunate to have an opportunity such as Gallatin Steel's field day. The company not only demonstrates their commitment to the environment and to safety, they provide students with a broader understanding of science and the world around them.



Pat Underwood, Gallatin Steel's Environmental Coordinator, asks students what they learned during the field day.

Environmental Quality Commission Presents Earth Day Awards

Kentucky State University hosts annual environmental awards luncheon

The Environmental Quality Commission presented its Earth Day Awards on April 15, 2011 at Kentucky State University in Frankfort. The annual awards recognize individuals and organizations that have made positive contributions to environmental protection and stewardship. This year, Environmental Protection Agency (EPA) Region 4 Administrator Gwendolyn Keyes Fleming was the keynote speaker.

Dr. Leonard K. Peters, Secretary of the Energy and Environment Cabinet, provided opening remarks and assisted in the presentation of the 10 awards.

Steve Coleman, director of the Division of Conservation was on hand to accept an award to Bracken County Conservation District. This year they distributed roll-off dumpsters through an environmental grant collecting over 111 tons of items and reducing illegal dumping in the community.

Other statewide recipients this year were Candace Wells, Jessamine County Judge-Executive William Cassity, Green Castle Baptist Church, Bridgeport Christian Church, Randall Napier, Woodford County Conservation District, and Marvin Lee Bryant Jr.

The annual Public Service Award was given to J.R. Williamson of Scott County, who founded the Solid Waste Coordinators of Kentucky organization in 1993.

The recipient of the Lifetime Achievement Award was Dr. Lee Dew. Dr. Dew has been involved in environmental issues since 1969 and was key to getting sweet cereals removed from school breakfast menus in the late 70s.



Steve Coleman accepts award on behalf of Bracken County Conservation District



Lillie Cox, Woodford County Conservation District and Peggy Seal, Conservation District Supervisor accept the award with Herman Pittman (left center). Conservation District Supervisor.

Kentucky Mine License Statistics

2010 Licenses 2011 Licenses February 16, 2010 February 15, 2011 Surface Underground Total Surface Underground Total 157 159 316 194 359 165 May 21, 2010 May 31, 2011 Surface Underground Total Surface Underground Total 206 174 380 228 180 408

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